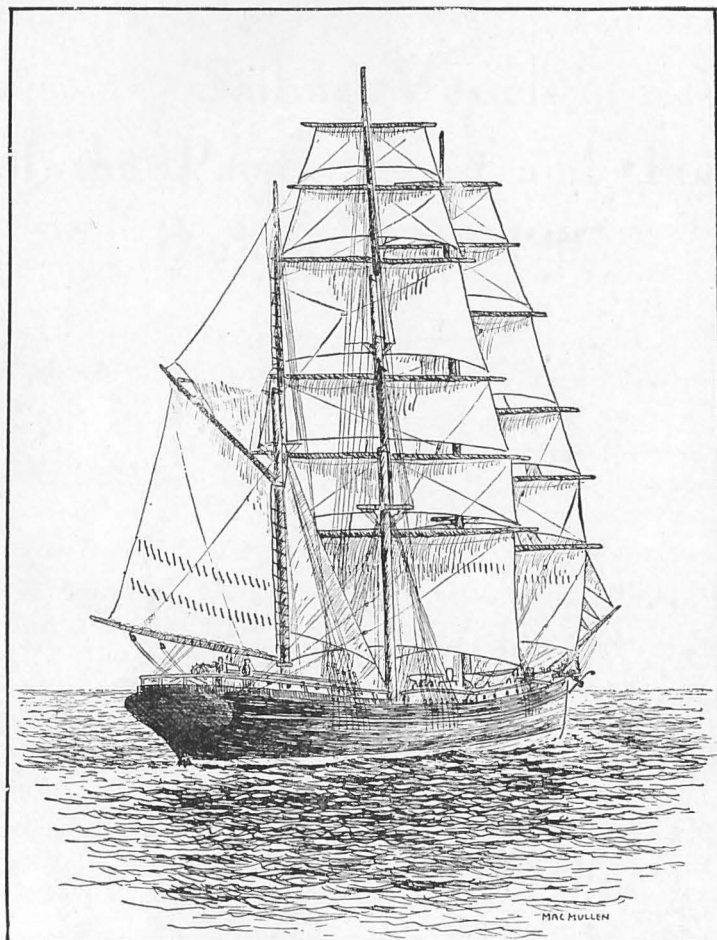


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The Sailing Vessels of the Pacific Coast and Their Builders

1850 - 1905

By JOHN LYMAN



Bark Hesper

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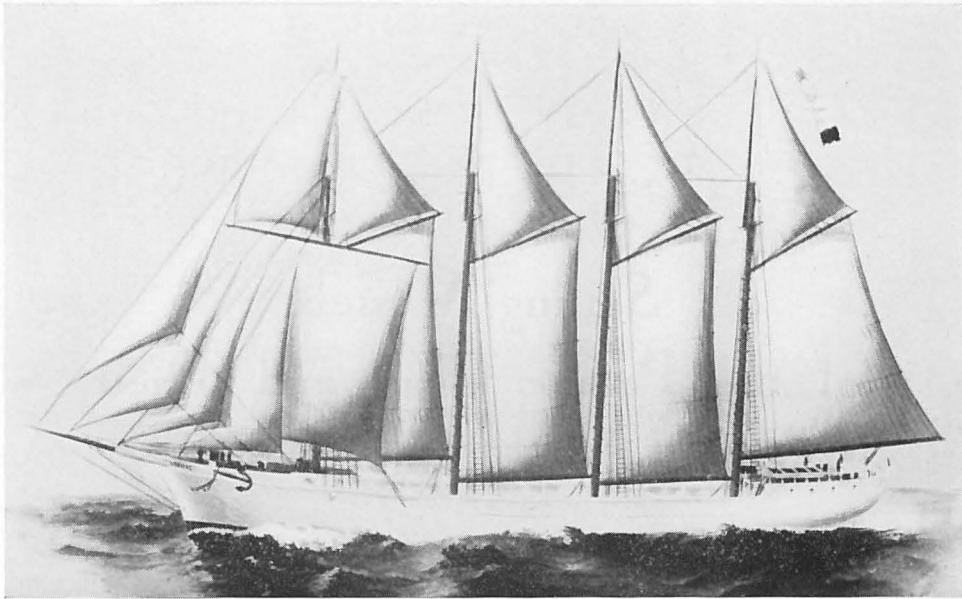
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1850-1902

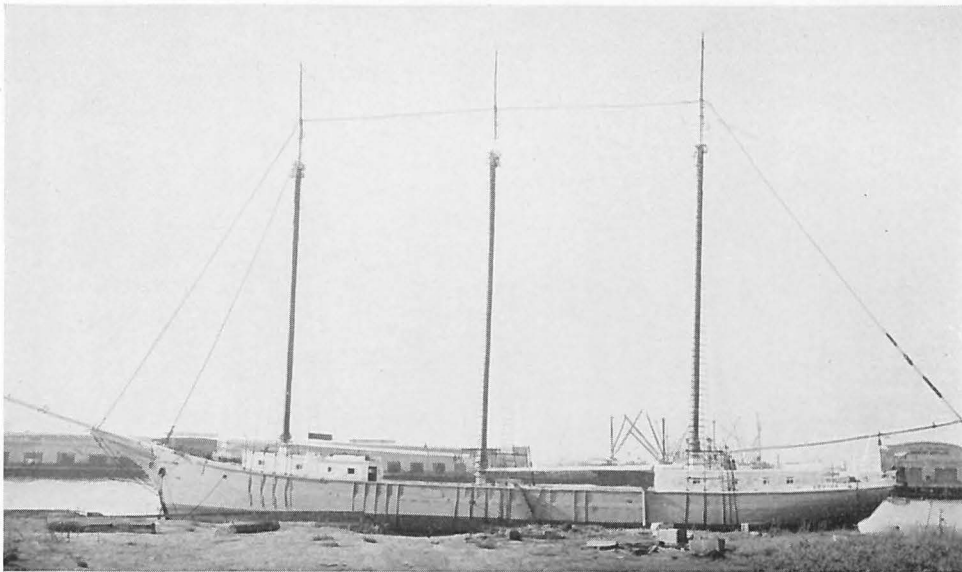
D. JOHN LYMAN



Sailing Vessels
of the Pacific Coast and Their
Builders, 1850-1905



SCHOONER "ADMIRAL"



SCHOONER "LOUISE"

Sailing Vessels of the Pacific Coast and Their Builders, 1850-1905*



THE sailing vessels of the Pacific coast of North America and their builders have received scant attention from marine historians. New York, New England, and the Maritime Provinces of Canada have had their chroniclers, but no comprehensive study has yet appeared of the wind-driven vessels of the West coast. As a preliminary survey, the present checklist is an attempt to set down the rig, tonnage, year and place of building, and builder of every sailing vessel over 100 gross tons built in California, Oregon, Washington or British Columbia between 1850 and 1905, as far as these details could be ascertained.

The lower limit of 100 tons is not entirely arbitrary, as under United States law it represents the dividing line between seagoing vessels assigned signal letters and those not so classed, while in British usage it is the minimum size for vessels to be listed in *Lloyd's Register*. The earlier limit of 1850 is the year California was admitted as a State, while 1905 is the last year in which sailing vessels were built on the Coast until the Great War.

In arranging the list, alphabetical rather than chronological or geographical was chosen, for convenience in locating vessels by name. Original names are used throughout, and no notice is taken of cases where a vessel's name was changed—a comparatively rare occurrence in this group of ships. It will be observed that the alphabetical order, with respect to names having initials, follows the usage of *Merchant Vessels of the U. S.* Auxiliaries, steam-schooners and barges have been excluded, as they properly belong to another study.

*Abbreviations: Bktn, barkentine; bgtn, brigantine; sch, schooner; TS sch, top-sail schooner; (o), old measurement tonnage.

William G. Irwin	4m. Sch.	San Francisco, Calif.	1875	Hall Bros.
Wm. H. Smith	2m. Sch.	Port Ludlow, Wash.	1890	Hall Bros.
Wm. H. Stevens	3m. Sch.	North Bend, Ore.	1902	T. C. Reed
William L. Beebe	4m. Bktn.	Ballard, Wash.	1893	White
Willie R. Hume	4m. Sch.	Prosper, Ore.	1881	Hall Bros.
Willis A. Holden	2m. Sch.	San Francisco, Calif.	1899	Hall Bros.
		Blatny, Wash.	1888	Hall Bros.
			141	
			118	
			665	
			296	
			146	
			306	

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Tonnages—Until 1865 the tonnage of American vessels was arbitrarily estimated by dividing 95 into the product of three factors: beam, depth, and tonnage length. Tonnage length was taken as registered length minus $\frac{3}{5}$ of the beam. If the depth was greater than $\frac{1}{2}$ the beam, the lesser measurement was used instead. In the first quarter of 1865, the United States adopted the system which had been in use in England since 1854, namely, that of expressing tonnage in units of 100 cubic feet of the actual internal capacity of a vessel, enough measurements being taken to approximate this very closely. The "old" measurement is therefore all that has been recorded for the vessels which were no longer afloat in 1865. The Kingdom of Hawaii retained this archaic system until about 1885, so that the tonnage of Hawaiian vessels up to this time is also the old measurement.

In 1882, the system of "gross" and "net" tonnages came into use in the United States. From the total or "gross" tonnage just described, a deduction was made to obtain the "net" or tonnage for tax purposes, supposedly corresponding to the actual earning spaces in a vessel. In the case of sailing vessels this deduction at first amounted to a flat 5 % of the gross tonnage. Later other deductions were allowed, with the result that the net tonnage of many vessels has decreased without any structural alterations. Because of the fluctuations of net tonnage, and because vessels no longer afloat in 1882 had no net tonnage, gross tonnages have been used throughout the list.

Trades—Pacific coast shipowners took almost no part in the trade between their ports and the North Atlantic. Of all the vessels in the list, only the ships *Wildwood* and *Western Shore* were built for the Cape Horn trade. In the '50's, a few small vessels, such as the *Susan* and *Kate Deming*, were built for general freighting, to Australia or the Orient; but the Pacific coast was not a source of manufactured articles until after the general adoption of steamships for carrying such cargoes on the main trade routes.

After its acquisition by the United States, Alaska provided a few trades for which vessels were specially built. Although the pelagic sealing schooners were mostly under 100 tons, the *Sophia Sutherland*, *Herman*, and *Ella Johnson* seem to have been built for this business. For the fur trade with the natives of the Arctic coasts there were built

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the schooners *Czar*, *Czarina*, two *Kodiaks*, *York* and *Nome*. Whaling, codfishing and salmon-packing drew mostly on second-hand vessels from the lumber fleet, but the *Antelope* was built as a salmon cannery tender. A couple of schooners, such as the *Rosario* and *Pio Benito*, were intended for trading with Mexico and Central America.

The islands of the Pacific provided an outlet for many products of Pacific coast shipyards. The bark *Albert*, barkentines *W. H. Dimond*, *S. N. Castle*, *S. G. Wilder* and *Irmgard*, brigs *Consuelo*, *John D. Spreckels*, *Lurline* and *Wm. G. Irwin*, and schooners *Anna*, *Claus Spreckels* and *W. H. Marston* were all built to carry sugar from Hawaii to San Francisco, with special accommodations for passenger traffic; while the little schooners *Kauikeaouli*, *Malol*, *Jennie Walker* and the first *Mary E. Foster* went to Hawaiian owners for inter-island trading. The brigs *Galilee*, *Geneva*, *Tahiti* and *Paloma*, barkentines *City of Papeete* and *Tropic Bird*, and schooners *Tarawa*, *Papeete* and *Staghound* were built for regular packet lines in trade with Tahiti; the schooners *Tamaru Tahiti* and *Teavaroa* were owned in Tahiti in trade among the islands; while the schooner *Pitcairn* was a missionary packet to the South Sea islands.

The schooner *Santa Paula* and barkentine *Fullerton*, the latter the largest vessel of the list, ran as oil tankers between Southern California and San Francisco or the Hawaiian Islands. The *Samson* was built for a salvage firm in San Francisco and was probably more barge than schooner. The schooner *Pathfinder* was built for the Columbia River Fishermen's Protective Union. For the "triangle trade," that is, a voyage with lumber from the Coast to Australia, a coal cargo to Honolulu, and a sugar cargo to San Francisco, there were built the barks *Hesper* and *Pacific Slope*, as well as some of the later barkentines; but most of the lumber vessels did not count on more than a coal charter from Newcastle to California on the return trip.

Apart from the exceptions just noted, the vast majority of Pacific coast sailing vessels were built to carry lumber, either redwood from the Mendocino and Humboldt regions or Douglas fir from farther north. In the foreign trade, most of the voyages were to Australia, the West coast of South America, or later to South Africa, with a few cargoes to the Orient or the Pacific islands; but the coasting lumber trade was the mainstay of the fleet until about 1905. Even

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such large square-rigged vessels as the *Cassandra Adams* and *Olympus* were planned for freighting lumber from Puget Sound to San Francisco; while the small schooners loaded in the shallow draft "outside" ports of Washington, Oregon and northern California for San Francisco or for equally shallow draft and even more "outside" ports in Southern California. There also was some movement of coal from British Columbia, Puget Sound and Coos Bay to San Francisco, and return cargoes of hay, lime, blasting powder and machinery for the mill ports; but second-hand square-riggers from the East coast carried most of the coal, and coasting steamers took the best of the freight business.

As practically all the lumber imports of Southern California came, and still come, by water from the Northwest, there is an intimate connection between the prosperity of the shipping and lumbering industries of the Coast, and the state of business in the Southwest. Thus the flourishing condition of Pacific coast shipbuilding during most of the '80's (Table 1) reflects the influx of population to Southern California after the coming of the railroad to Los Angeles in 1876 and to San Diego in 1885, while the peak after 1900 was due in part to the disturbances brought about by the Boer and Spanish Wars and the Klondyke rush, but mostly to the second Southern California boom after the hard times of the '90's.

When Eastern capital was attracted to the Pacific coast after 1900 a fleet of steamers was built which soon captured the coasting lumber trade except for the longer runs and some out-of-the-way ports, and the building of sailing vessels ceased entirely in 1905. The larger sailers were forced into the export lumber trade, and by virtue of the fact that they had been designed especially for freighting lumber, the wooden fore-and-afters managed to hold their own against foreign steel square-riggers and steam tramps until these competitors withdrew during the World War.

Rigs and Rigging—The Pacific coast schooners of the '50's and '60's were not very different from those built on the East coast during the same period, some of which, indeed, were sailed around the Horn and sold to West coast owners. Although it is now very difficult to determine whether a given schooner carried square yards of

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the foremast, there is evidence that this fashion continued on the Pacific longer than on the eastern seaboard of the United States. Early photographs and engravings show many such topsail schooners at the lumber ports. The schooners *J. B. Ford* of 1860 and *W. H. Meyer* of 1869 are both later listed as brigs, indicating that possibly their rig was on the border line between the two types. There is a record that the *Alice Haake* of 1867 lost a man from her topsail yard in 1869; and a descendant of their builders has recorded that the *Pio Benito* of 1873 and *Rosalind* of 1883 were both three-masted topsail schooners. Very few topsail schooners were built on the East coast after 1860.

Later on, in the '90's and thereafter, many of the larger four-masted schooners carried a single yard on the foremast, on which in fair winds a large squaresail was set flying, with raffee topsails above. Some schooners seem to have carried instead a spinnaker, set on booms like the rig of a modern yacht.

With regard to the number of masts, the West coast was not far behind the Atlantic. The *Susan and Kate Deming* (named for two actresses of the day) was a three masted schooner, but few more were built until the '70's; the *Emma Utter* of 1875 is sometimes called the first three-master. A four-master, the *Novelty*, appeared in 1886; this was a steamer hull rigged with pole masts and having a straight stem, and possibly for this reason the *Puritan* and *E. K. Wood* of 1888 have each been called the Coast's first four-master. The *Louis* of 1888, another steamer hull, was rigged with five masts, and actually antedates by a few months the *Governor Ames*, first five-master on the Atlantic. Not until the *Inca* of 1896 was an orthodox five-master built on the Pacific; and the *W. H. Marston*, *H. K. Hall*, *Crescent*, and *George E. Billings* were the only others produced during the period under review.

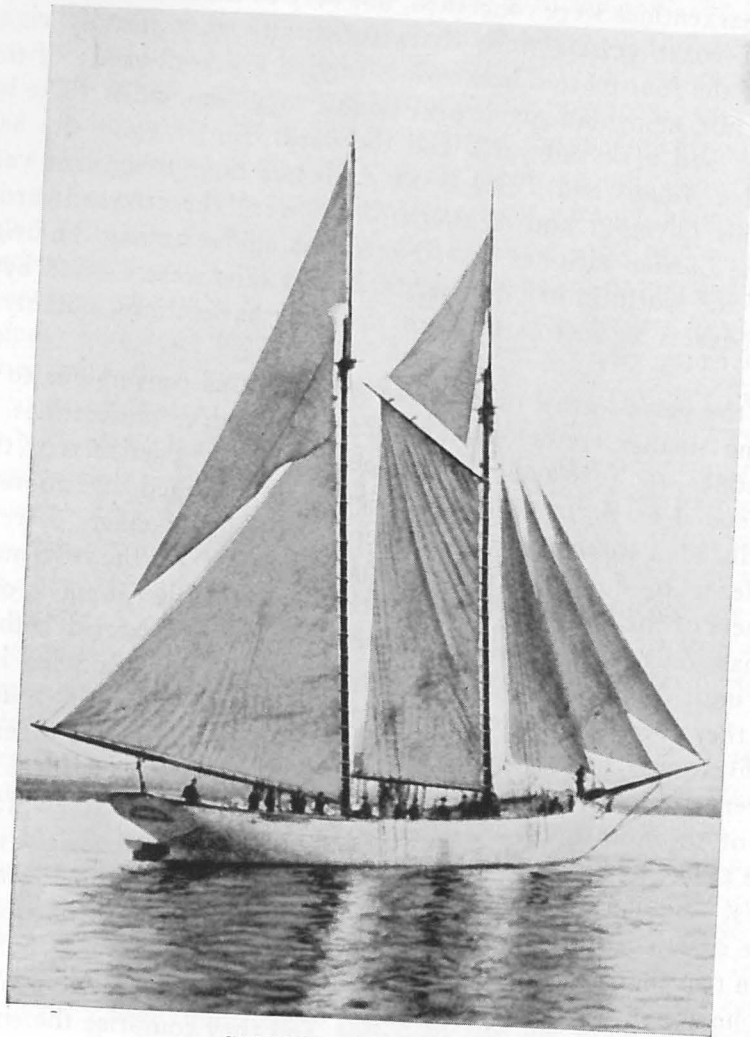
Brigs and brigantines were favored only for the Hawaii and Tahiti packet lines, and for the lumber trade out of Coos Bay, where the difficult entrance called for the superior handling qualities of a square-rigged vessel; a superiority which lasted only until a tug was stationed on the bar. As noted above, a couple of schooners of the '60's appear later as brigs, and the *Pitcairn* of 1890 was also rerigged as a brigantine after her first cruise. The nomenclature of the two rigs was

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different from that on the East coast, *brigantine* being used as in England, where *half brig* or *hermaphrodite brig* would have been used in New England; and both groups were frequently lumped under *brigs*. In the absence of a plan or portrait it is not now possible for this reason to settle with finality the rig of a given vessel; but of both classes together there were over 20 built on the Coast, from the *Blanco* of 1858 to the *Geneva* of 1892, which was probably the last merchant brigantine built in North America.

The barkentine rig has always been well favored on the Pacific, representing as it does the extreme phase of the tendency already mentioned for schooners to carry square sail on the foremast. The *Monitor* of 1861 was the first one built on the Coast. Four-masters appeared in 1890 with the *Willie R. Hume* and *Charles F. Crocker*; but no five-masters were built during the period of the list. Of barks, only about a dozen were built, from the *Legal Tender* of 1863 to the *Albert* of 1890. Just as in the case of the brigs and brigantines, there was a tendency to lump barks and barkentines together under the shorter name, and in the earlier vessels there is often confusion as to whether the original rig was changed, or only its designation. Only three full-rigged ships were produced on the Pacific coast, the *Western Shore*, *Wildwood*, and *Olympus*; but in their sailing qualities they were the equal of any vessel built in North America after 1870.

One feature distinguishing many vessels owned on the Pacific coast was the omission of a gaff on the aftermost fore-and-aft sail. This is sometimes incorrectly said to have been introduced on schooners built in Alaska; but the idea actually originated with the ship-builder Matthew Turner, and was used as early as 1879 in the mainsail of the two-masted schooner *Rosario*, as well as in his brigantines built a couple of years later. A triangular topsail, locally called a *ringtail*, was set above the leg-of-mutton mainsail or spanker. The leg-of-mutton rig was used in barks and most of the three-masted barkentines; in the larger four-masted schooners; and in practically all the four-masted barkentines and five-masted schooners. Even in the schooners which carried a gaff-headed spanker, this sail was of moderate size and not the enormous one of the East coast schooner. Fewer headsails were required to balance the smaller spanker, so that bowsprit and jibboom were lighter spars than on the Atlantic coast;



SCHOONER "PITCAIRN"

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indeed after 1895 spike booms were often used on the larger vessels. Barkentines and schooners had the trucks of all their masts the same height above the waterline; a feature, at least as far as the three-masted barkentines were concerned, not very common on other coasts.

West coast vessels were characteristically very heavily rigged. Many of the four-masted barkentines carried a skysail yard; of those that did not, many had royals over double topgallant sails. The bark *Newsboy* had a skysail yard, and the bark *Hesper* two; the barks *Cassandra Adams* and *Tidal Wave* each had four topgallant yards. The ships *Olympus* and *Western Shore* were three-skysail-yarders, while the *Lurline* with her skysail yard was unique among the brigantines of the world in her decade. Studding sails were carried by the Island packets as well as some of the later barkentines, notably the *Kohala*.

As the vessels grew older there were various conversions to rigs requiring smaller crews. Barks were converted to barkentines, and barkentines to fore-and-aft schooners. Brigs, particularly those which ended as Bering Sea codfishers, were rerigged as two-masted or baldheaded three-masted schooners; while in schooners there was a tendency to do away with topmasts. Most of the two-masted schooners of the '60's and '70's had been rigged with a topmast on the mainmast only, while the later two-masters usually carried both topmasts until the advent of the auxiliary engine. But beginning in the '80's, there began to appear a few new schooners of three, four and even five masts, in which the topmasts were omitted, and older vessels were often cut down to this *baldheaded* rig, as it was called. The head of the lowermast was continued as a pole some 10 or 12 feet above the capstay, so that the effect was not quite as unsightly as it sounds. Baldheaded schooners were a favorite berth among sailors in the coasting trade, as in the long ballast beat to windward on the return trip there were no gaff-topsails to shift when tacking.

The accompanying illustrations have been chosen to show as wide a variety of rigs and sails as possible, and they comprise the six most common rigs given on the vessels in the list. Although the number of masts has not been determined in every case, it can usually be guessed from the size of the vessel, and the accompanying table gives the distribution and range in tonnages of the different classes.

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Hull Construction—With regard to the smaller and earlier vessels there is reason to suppose that they were not very different from similar craft built on the Atlantic, but in view of the diverse origins of the West coast shipbuilders and the uniformity of the trade for which their products were intended, it is not surprising to find that through trial and error a characteristic type of hull was worked out, admirably suited for lumber carrying to the sacrifice of certain other desirable qualities. By giving the ends of the hull plenty of fineness and a fair amount of deadrise to the floor, enough immersion was secured to enable the vessel to sail empty without ballast. New-comers to the trade were amazed at the way a lofty barkentine could stand up empty with only a few tons to put her in proper sailing trim. Sheer was reduced to a minimum to enable long timbers to be stowed on deck; and since lumber is not harmed but actually improved when carried on deck, a vessel frequently was designed to carry over half her cargo in this way. To this end, even the largest of the fleet were built with but a single laid deck and not more than a few beams in the hold. Longitudinal strength lost in this way was gained back by increasing the keelson, and thickening the ceiling planking out to the turn of the bilge. When the ship *Olympus* was launched in 1880, she attracted wide attention as being the largest single-decked vessel in the world, with $14\frac{1}{2}$ feet of solid timber between the top of her keelson and the bottom of her keel; but she was exceeded in both respects by some of the vessels of twenty years later.

Poop and forecastle were raised to give the crew some measure of dryness when working the ship, and the fore part of the poop was raised in two steps to break up the force of a boarding sea. When carrying coal, part of the cargo was taken on deck in obedience to the old maxim "keep the weights high," but when heavy perishable cargo such as sugar or nitrate had of necessity to be stowed all below deck, the West coast lumber vessel rolled at her miserable worst. In lumber capacity however, expressed in units of 1,000 board feet, the West coast vessel could carry 130% of her net tonnage, while her steel competitors stowed just under 100%, and the Down East wooden square-riggers with their three decks and appurtenant knees could not lift over 80% and required ballast underneath in addition. During the World War the West coast design was copied in some

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schooners built on the Atlantic and Gulf coasts; and even in the Baltic countries similar vessels were launched.

Places of Building—The geographical location of wooden shipyards on the Pacific coast has always been determined by the balance between two factors—nearness to the raw material, the forests of the Northwest, on the one hand; and nearness to centers of population, the sources of capital, labor and the many manufactured articles which go into shipbuilding, on the other. In the second category San Francisco was the only example until nearly the end of the period under review; for although the railroad reached Seattle in 1884 that city did not become of importance until the Klondyke rush in 1897, while Los Angeles and San Diego were still later in developing as centers of industry. Only one vessel in the list was built south of San Francisco, the schooner *Jennie Thelin*, at Davenport Landing, near Santa Cruz. Table 3 summarizes the geographical distribution of the ships in the list.

It will be observed that the greater part of the shipbuilding was carried on in the lumber country, where the timber could be selected from the choicest part of a mill's cutting, and the long planks necessary to add strength to a single-decked hull obtained with a minimum of expense. The San Francisco Bay yards contributed mostly smaller vessels except in boom times when their nearness to the sources of labor helped them in getting contracts for the larger classes. On Humboldt Bay the yards were helped by a slight preference for the Douglas fir of that region; and Coos Bay tapped the remarkable but restricted stand of Port Orford cedar, which was in great favor for frame timbers; with that single exception the universal shipbuilding material was Douglas fir, with laurel in the stem and rudder posts and other spots where hardwood was called for.

The Shipbuilders—Little is known of many of the men who pioneered the shipbuilding industry on the Pacific coast. The following paragraphs present all that could be learned of any builders credited in the list with two or more vessels.

L. S. ALLEN built the schooners *Bobolink* and *Sparrow* at Oakland in 1868-69 for the Simpsons. ROBERT BANKS built the barkentine *John C. Meyer* at Tacoma in 1902 in the yard of the Hardy

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Shipbuilding Co. Later the same year he and K. V. Kruse took over the old Simpson yard at Coos Bay. The Kruse & Banks Shipbuilding Co. is still engaged in building wooden vessels at North Bend, with Robert Banks as president. JACOB BELL built several small schooners at San Francisco in the '60's.

HANS DITLEY BENDIXSEN (1842-1902), a native of Denmark, came to San Francisco in 1863, and to Eureka in 1868. After working in the Cousins yard he started building on his own account in 1869, and moved across to Fairhaven in 1875. He was in partnership with Peterson for a time in 1878. In 1901 Bendixsen sold his plant, which was incorporated as the BENDIXSEN SHIPBUILDING CO., and continued to build vessels until 1916, when it was taken over by the Rolph Shipbuilding Co. The output of the yard up to that time had been over 150 vessels.

GEORGE BOOLE built the barkentine *Modoc* at Utsalady in 1873, and was established at San Francisco in the '80's with John Beaton. BOOLE & BEATON built steamboats and a few schooners. WILLIAM A. BOOLE (1830-1902) was a native of the Maritime Provinces and an old Samuel Hall apprentice. He came to San Francisco in 1853, working first at the Mare Island Navy Yard. In the '60's he was in partnership at San Francisco with one Simmons as shipwrights, while in 1870 he joined with George Middlemas. In 1901 he started a yard at Oakland with his son, building steamers and some large barkentines. About 1908 this plant was taken over by the Moore & Scott Iron Works, now Moore Drydock Co.

WILLIAM H. BRYANT launched a couple of small schooners at Navarro in the '60's, and then moved to Puget Sound, where he built several barks and barkentines. GEORGE BUCHART built small schooners at San Francisco in the '70's. EUPHRONIUS COUSINS, a native of Maine, first learned shipbuilding at Ellsworth, Maine. Coming to California in 1865, he established a yard at Eureka in partnership with a brother as E. & H. Cousins. He also engaged in lumbering operations, and in 1883 sold the shipyard to David Evans. After various business enterprises he returned to shipbuilding, starting a yard at Aberdeen, Washington, with Wm. H. McWhinney. He died there in 1901. JAMES C. COUSINS, apparently another brother of the above, was building at North Point in San Francisco in the '60's, and was later manager of the Merchants' Drydock Co.

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John Watson Dickie (1842-1927) and his brother James were Scots who came to San Francisco in 1870 and started shipbuilding there in 1871 as DICKIE BROTHERS. After building over 40 vessels they were forced into bankruptcy in 1883 when the Mexican Government failed to honor a \$350,000 contract for a gunboat under construction. James then became superintendent of the Union Iron Works (now part of Bethlehem Shipbuilding Co.), of which another brother, George, was manager, while John went with the Fulton Iron Works. In 1901 he started a yard at Alameda as JOHN W. DICKIE & SONS, building the schooner *Ruby* and several steamers and bay ferries.

HIRAM DONCASTER, a native of Nova Scotia, came to the Pacific coast in 1856, and built several vessels on Puget Sound as master builder for Middlemas & Boole, including the barks *Forest Queen* and *Cassandra Adams* and the ship *Olympus*; he also built the schooner *J. B. Leeds* on the Umpqua. J. H. FARNUM and JURGEN J. FRANSEN were San Francisco shipbuilders of the '60's and '70's.

The HALL BROTHERS, Isaac, Henry Knox, and Winslow G., were natives of Cohasset, Massachusetts, who came to San Francisco in the '60's. They engaged in ship carpentering and shipbuilding there until 1873, when Isaac was sent to Port Ludlow to build the schooner *Z. B. Heywood*. There the following year Isaac and Winslow established a yard, their first vessel being the schooner *Annie Gee*. Henry Hall joined the firm in 1875; Isaac died in 1879. In 1880 they moved to Port Blakely. Winslow Hall died in 1898; Henry retired in 1903 after building 108 vessels, and died in 1909. James W. Hall, of the second generation, moved the yard to Winslow in 1903, first as Hall Brothers Marine Railway & Shipbuilding Co.; by a later sale it became the Winslow M. R. & S. B. Co., and as such is still in operation.

JOHN A. HAMILTON (1827-1909), a native of New Hampshire, came to California in 1849. He built some schooners at Point Arena in the '60's, and was later a justice of the peace there. ALEXANDER HAY came from Nova Scotia to San Francisco in 1856. He first had a yard there, moving to Alameda about 1890, and later going into partnership with E. B. Wright. HAY & WRIGHT built several fine schooners, as well as the tanker *Fullerton*, largest vessel of the list.

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E. H. HEUCKENDORFF established a yard at Prosper, Oregon, about 1900, building schooners and steamers. GEORGE H. HITCHINGS, a son-in-law of Peter Mathews, was at Hoquiam in partnership with one Joyce from 1897 to 1906. Later he did contract work along the coast; and at his death in 1917 was manager of the Pacific American Fisheries shipyard at Bellingham, Washington.

D. HOLDEN was master builder in 1874-75 at the Marshfield yard of E. B. Deane & Co., and also built the schooner *Laura Madsen* at Gardiner in 1882. The Deane yard had been established in 1867, when James McGee was sent to Coos Bay by John Pershbaker to build a sawmill. With Howlett, McGee built three small schooners and a tug at the mill and Howlett built other vessels there until 1870. The property was sold by Pershbaker in 1871 and acquired by Deane in 1873. JOHN HAMILTON HOWLETT was born in Prince Edward Island in 1836 and had been building vessels on Coos Bay since 1862. He was drowned at Astoria, Oregon, in 1885.

JOHN KRUSE built some schooners on the Umpqua in the '60's. In 1872 he appears as master builder at the Simpson yard on Coos Bay, producing the ship *Western Shore*, four-masted schooner *Novelty* and five-masted schooner *Louis*, each the first of her type built on the coast. The *Louis* was the last vessel with which his name is associated. K. V. Kruse, no relation to the above, took over the old Simpson yard in 1902 with Robert Banks as KRUSE & BANKS. He died in 1935.

JOHN LINDSTROM established a shipyard at Aberdeen, Washington, in 1899. One of the leading business men of that city, he was twice mayor, and in 1907 bought the Bendixsen Shipbuilding Co. He was killed in a fall at Salem, Oregon, in 1908. There seem to have been more than one McDONALD engaged in shipbuilding on the Pacific coast. The name appears as builder of the brig *Arago* for the Simpsons in 1859; as builder of a schooner at San Francisco in 1869 and as a partner of Bendixsen at Eureka the same year; as builder of the *Annie Stoffin* in the Pershbaker yard in 1870; and as builder of the *Pioneer* and *Volunteer* for the Simpsons at Hoquiam in the '80's.

WILLIAM H. McWHINNEY was in partnership with E. Cousins at Aberdeen, Washington, after 1900. DOMINGO MARCUCCI came to San Francisco in 1849 and engaged at once in shipbuilding. His

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products were mostly steamboats and small schooners, but they also included the schooner *Fanny*, and the *Monitor*, the Coast's first barkentine. Later he built and owned river steamers, and in the '90's was assistant inspector of hulls of wooden vessels at San Francisco. PETER MATHEWS had the old Cousins yard at Eureka in the '90's and later moved to Hoquiam, Washington, where first his son-in-law, Hitchings, and later his son (who spelled the name Matthews) continued the business.

GEORGE MIDDLEMAS came to San Francisco in 1854. He started shipbuilding in 1858 on Puget Sound, and established himself at San Francisco in 1860, building a number of steamers and schooners. He also prepared plans for the schooners *Sea Nymph* and *Ocean Pearl*, barks *Forest Queen* and *Cassandra Adams*, ship *Olympus*, barkentines *Kitsap* and *Skagit*, and four-masted schooners *Skagit* and *W. F. Jewett*. In 1870 he became a partner of W. A. Boole, and the firm of MIDDLEMAS & BOOLE, in addition to building ships, operated half a dozen square-riggers in the Cape Horn trade. The MORAN BROTHERS Co. of Seattle is better remembered as a steel shipyard, having built the *U. S. S. Nebraska*; but they also turned out the *James Johnson* and *Minnie A. Caine*. The business is still a going concern, having been successively the Moran Co., the Seattle Construction and Drydock Co., the Todd Shipyards Corp., and the Seattle-Tacoma Shipbuilding Co.

LUDWIG MORTENSEN was located at Maine Prairie, on the Sacramento, in the '70's, at San Francisco in the '80's, and at Seattle in the '90's. CHARLES MURRAY also moved often, appearing at San Francisco, Eureka, Coos Bay and Puget Sound. JOHN G. NORTH (1826-1874), a native of Norway, came to San Francisco in 1850 and after four months as a miner turned to shipbuilding. He built the Coast's first three-masted schooner, the *Susan and Kate Deming*, and 272 other hulls. Unlike most of the other shipbuilders of his day he was a trained naval architect. He died in California of fever contracted while building steamers and a railroad in Guatemala. JIREH S. NICHOLS came to San Francisco from Fall River, Massachusetts, in the '60's. He later moved to San Diego, where he won local fame as a yacht builder. The NORTH BEND MILL Co. was one of the units of the Simpson Lumber Co. The PACIFIC SHIPBUILDING Co. operated

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a yard at Marshfield, Oregon, after 1900, and built vessels for the Pacific Shipping Co., apparently a related concern, as well as for other owners.

Captain THOMAS H. PETERSON built some 20 small schooners along the Mendocino coast. He was also in partnership with Bendixsen for a brief period on Humboldt Bay, and built in addition at San Francisco, Umpqua, and Ballard, Washington. HANS H. REED, a native of Norway, came to San Francisco in 1860, and worked as a draftsman for North for seven years. In 1869 he helped with the *Jennie Thelin*, and then built with his brother at Port Madison. From 1874 to 1887 he built for the Deane yard at Marshfield; built the *Puritan* at Port Madison in 1888, and then moved to the Coquille where he built steamers and small schooners. OLAF REED built the *Jennie Thelin*, his brothers Edward and Hans working on her; then with Hans built the *W. S. Phelps*, *S. M. Stetson* and other vessels at Port Madison. Olaf then settled on Coos Bay, being owner and master of the river steamer *Ceres* and part-owner of a general store at the town of Norway. THOMAS C. REED started a yard at Ballard, Washington, about 1900, building steamers and schooners, including five large schooners under the name of the Globe Construction Co. for the Globe Navigation Co.

The SIMPSONS were natives of the State of Maine. A. M. Simpson started lumbering on the Coast shortly after 1850. By 1882 he had 7 mills in California, Oregon and Washington, and had built over 30 vessels in shipyards at North Bend, on the Columbia opposite Astoria, and at yards leased at San Francisco, Oakland and the Umpqua. Ebbridge Simpson, a brother, came out to build the brig *Blanco*; another brother, R. W. Simpson, drew the sail plan for the ship *Western Shore*, which was designed by A. M. Simpson and built by John Kruse. The yard of the North Bend Mill Co. continued to build ships until 1902, when it was taken over by Kruse & Banks; while the Simpson Lumber Co. also had a yard at Hoquiam in the '80's.

W. F. STONE started as a builder of yachts and small vessels at San Francisco in the '80's. After 1900 he built several large vessels, including the schooner *W. H. Marston*. About 1912 the yard was moved to Oakland, where it is still operated by his son and is still noted for its yachts. PATRICK H. TIERNAN was another San Fran-

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cisco shipbuilder of the '60's. MATTHEW TURNER (1825-1909), a native of Ohio, came to San Francisco in 1850. After three years in the mines he began trading with his own vessels. In 1868 he built the brig *Nautilus* in the Cousins yard at Eureka for his Tahiti trade, incorporating his own ideas in her design, and was so encouraged that he commenced building at San Francisco in 1875. In 1883 he moved to Benicia, and built in all some 220 vessels. CHARLES G. WHITE began shipbuilding at San Francisco in the '70's and moved to Alameda in 1890. About 1900 he moved to Everett, Washington, where he died in 1904 and the yard was discontinued.

BIBLIOGRAPHY

Hopkins, Perkins, Crawford, Taylor and Stone, *Report on Port Charges, Shipping and Shipbuilding, Etc.* (San Francisco: 1885), give a list of vessels over 50 tons built on the Pacific coast of the United States from 1860 to 1884. The name of the builder is recorded in nearly every case. With due allowance for errors in spelling, this has served as a primary source up to 1885. The *Reports to the Board of Marine Underwriters of San Francisco* by Hopkins and Ringot in 1867 and 1874 list some vessels with builders, going back earlier than 1860, and also giving a great deal of information on materials and building costs. Hall's *Report on the Shipbuilding Industry* in the report of the 10th U. S. Census, 1882, is also useful for the earlier period.

The annual *List of Merchant Vessels of the United States*, published by the government, was used as the chief source for the vessels built in 1885 and thereafter. This source does not give the names of builders, nor are vessels built for foreign owners included. These gaps have been filled from random volumes of various classification society registers, including *Lloyd's Register of Shipping*, *American Lloyd's Register*, and the *Register of the American Bureau of Shipping*. For American vessels built since 1900 a series of tables in *Merchant Vessels of the U. S.* from 1933 to 1937 lists the shipbuilders and their output; but this compilation is not very complete with respect to vessels lost before 1910. During the '80's, the *Annual Reports of the San Francisco Chamber of Commerce* tabulate, with builders, the ships built at and for that port; and E. W. Wright, *Lewis & Dryden's Marine History of the Pacific Northwest* (Portland, Oregon: 1895), provides similar information for Oregon, Washington and British Columbia.

The files of *Pacific Marine Review* since 1914, particularly a series in 1917 on early Pacific coast shipbuilding, have proved of value.



BRIGANTINE 'LURLINE'

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Overland in 1895 had a series of reminiscences of early San Francisco shipbuilders. The *Marine Digest* of Seattle in June and July, 1940, carried an account of the Hall Brothers, with a complete list of their vessels. Thrum's *Hawaiian Annuals* contain much information on the merchant marine of the Kingdom of Hawaii. Some checking was done in the archives of the San Francisco Customs House, but for the most part the customs records of the Pacific coast remain untapped, and completion of the WPA project at present at work in the San Francisco archives, and its extension to other ports, will be of major importance. Bancroft's *Works* and other local histories too numerous to mention have yielded particulars of a few vessels not otherwise recorded, as well as much of the biographical material.

H. I. Chapelle, *History of American Sailing Ships* (New York: 1935), gives plans of schooners *Caroline* and *Inca* and barkentines *W. H. Dimond* and *James Tuft*, as well as contracts and specifications of the *Caroline* and *Tuft*. The Historic American Merchant Marine project has collected and deposited in the U. S. National Museum lines of the schooner *Lily* and complete plans of schooner *Commerce*, barkentines *Kohala*, *Amazon* and *Amaranth*, and bark *Newsboy*. Sail plan of the brigantine *Galilee* can be found in *Rudder*, January 1930, page 29. The Winslow Marine Railway and Shipbuilding Company have preserved the plans of a score or more of Winslow Hall's designs, and have generously allowed me to microfilm them.

I wish to acknowledge my indebtedness to the men who have assisted me with this list in their interest in preserving some of the maritime history of the Pacific coast, particularly Captain P. A. McDonald, Hugh M. Delanty, Nelson Andrews, R. E. Webb, L. D. Smith, and Jerry MacMullen.

NAME	RIG	TONS	PLACE BUILT	YEAR	BUILDER
A. B. Johnson	4m.Sch.	529	Aberdeen, Wash.	1900	Lindstrom
A. F. Coats	4m.Sch.	617	Hoquiam, Wash.	1901	Hitchings
A. J. West	4m.Sch.	543	Aberdeen, Wash.	1898	McWhinney
A. M. Baxter	4m.Sch.	516	Fairhaven, Calif.	1898	Bendixsen
Abbie	2m.Sch.	146	Eureka, Calif.	1876	Bendixsen
Active	2m.Sch.	147	Gardiner City, Ore.	1872	Buchart
Addenda	4m.Bktn.	692	North Bend, Ore.	1895	
Addie C. Hesseltime	2m.Sch.	135	San Francisco, Calif.	1885	W C. Wood
Adelaide	2m.Sch.	130	San Francisco, Calif.	1883	Boole & Beaton
Admiral	4m.Sch.	683	North Bend, Ore.	1899	
Advance	Brig.	210	North Bend, Ore.	1862	W. C. Robinson
Advance	3m.Sch.	281	Parkersburg, Ore.	1902	S. Danielson
Advent	4m.Sch.	431	North Bend, Ore.	1901	
Aida	4m.Sch.	533	Port Ludlow, Wash.	1890	
Alaska	2m.Sch.	138	Port Townsend, Wash.	1867	Calhoun Bros.
Albert	Bark.	682	Port Blakely, Wash.	1890	Hall Bros.
Albert Meyer	3m.Sch.	459	Fairhaven, Calif.	1896	Bendixsen
Albion	Sch.	201 (o)	San Francisco, Calif.	1861	J. C. Cousins
Alcalde	3m.Sch.	321	Port Blakely, Wash.	1882	Hall Bros.
Alert	4m.Sch.	623	Hoquiam, Wash.	1902	Hitchings
Alex T. Brown	4m.Sch.	788	Ballard, Wash.	1903	T. Reed
Alice	Sch.	146	Eden Landing, Calif.	1863	S. Ligouri
Alice	2m.Sch.	232	Bean's Point, Wash.	1874	C. Saunders
Alice Cooke	4m.Sch.	782	Port Blakely, Wash.	1891	Hall Bros.
Alice Haake	2m.TS.Sch.	244	Port Blakely, Wash.	1867	J. G. Haake
Alice Kimball	2m.Sch.	107	Little River, Calif.	1874	Peterson
Allen A.	3m.Sch.	342	Fairhaven, Calif.	1888	Bendixsen
Aloha	4m.Sch.	814	Port Blakely, Wash.	1891	Hall Bros.
Alpena	4m.Sch.	970	Port Blakely, Wash.	1901	Hall Bros.
Alpha	Sch.	300	North Bend, Ore.	1903	Simpson L. Co.
Alumna	4m.Sch.	696	North Bend, Ore.	1901	N. Bend Mill Co.
Alvena	4m.Sch.	772	Fairhaven, Calif.	1901	Bendixsen
Amanda Ager	Sch.	110	San Francisco, Calif.	1866	Middlemas
Amaranth	4m.Bktn.	1109	Benicia, Calif.	1901	Turner
Amazon	4m.Bktn.	1167	Benicia, Calif.	1902	Turner
Amelia	3m.Bktn.	397	Marshfield, Ore.	1870	Murray
American Boy	2m.Sch.	183	Seabeck, Wash.	1882	Doncaster
American Girl	2m.Sch.	225	Port Ludlow, Wash.	1875	Hall Bros.

NAME	Rtg	TONS	PLACE BUILT	YEAR	BUILDER
<i>Andy Mahony</i>	4m.Sch.	566	Aberdeen, Wash.	1902	Lindstrom
<i>Anna</i>	2m.Sch.	239	San Francisco, Calif.	1881	Turner
<i>Annie Gee</i>	2m.Sch.	154	Port Ludlow, Wash.	1874	Hall Bros.
<i>Annie Larsen</i>	3m.Sch.	376	Port Blakely, Wash.	1881	Hall Bros.
<i>Annie Lyle</i>	Sch.	195	Port Ludlow, Wash.	1875	Hall Bros.
<i>Annie Stoffin</i>	Sch.	119	Marshfield, Ore.	1870	McDonald
<i>Annie E. Smale</i>	4m.Sch.	845	Marshfield, Ore.	1903	
<i>Annie M. Campbell</i>	4m.Sch.	565	Port Blakely, Wash.	1897	Hall Bros.
<i>Antelope</i>	2m.Sch.	123	Benicia, Calif.	1887	Turner
<i>Arago</i>	Brig.	185	North Bend, Ore.	1859	McDonald
<i>Arago</i>	4m.Bktn.	498	North Bend, Ore.	1891	
<i>Argonaut</i>	2m.Sch.	194	San Francisco, Calif.	1880	White
<i>Argus</i>	4m.Sch.	566	Marshfield, Ore.	1902	Pacific SB. Co.
<i>Ariel</i>	4m.Sch.	726	Benicia, Calif.	1900	Turner
<i>Arilla</i>	Sch.	107	Port Angeles, Wash.	1899	
<i>Arthur I</i>	2m.Sch.	129	Benicia, Calif.	1889	Turner
<i>Augusta</i>	Brig.	137	Tillamook, Ore.	1872	Merrill & Co.
<i>Aurora</i>	2m.Sch.	193	Eureka, Calif.	1873	Bendixsen
<i>Aurora</i>	4m.Bktn.	1211	Everett, Wash.	1901	Everett SB. Co.
<i>Azalea</i>	3m.Sch.	344	Eureka, Calif.	1890	Bendixsen
<i>B. H. Ramsdell</i>	Sch.	134	San Francisco, Calif.	1866	Fransen
<i>Bainbridge</i>	4m.Sch.	566	Port Blakely, Wash.	1900	Hall Bros.
<i>Balboa</i>	4m.Sch.	777	Port Blakely, Wash.	1901	Hall Bros.
<i>Bangor</i>	4m.Sch.	511	Eureka, Calif.	1891	Bendixsen
<i>Barbara</i>	2m.Sch.	117	Little River, Calif.	1877	Peterson
<i>Barbara Hernster</i>	2m.Sch.	148	Fairhaven, Calif.	1887	
<i>Bella</i>	Sch.	180	Acme, Ore.	1896	
<i>Benicia</i>	3m.Bktn.	674	Benicia, Calif.	1899	Turner
<i>Bertha Dolbeer</i>	3m.Sch.	242	Fairhaven, Calif.	1881	Bendixsen
<i>Bertie Minor</i>	3m.Sch.	272	Fairhaven, Calif.	1884	Bendixsen
<i>Berwick</i>	2m.Sch.	100	Benicia, Calif.	1887	Turner
<i>Beulah</i>	3m.Sch.	357	San Francisco, Calif.	1882	Dickie Bros.
<i>Big River</i>	2m.Sch.	160	Freeport, Wash.	1872	Murray
<i>Blakely</i>	4m.Sch.	751	Port Blakely, Wash.	1902	Hall Bros.
<i>Blanco</i>	Brig.	284(o)	North Bend, Ore.	1858	Simpson
<i>Bobolink</i>	2m.Sch.	170	Oakland, Calif.	1868	Allen
<i>Bonanza</i>	2m.Sch.	135	San Francisco, Calif.	1875	Nichols

<i>Borealis</i>	4m.Sch.	764	Fairhaven, Calif.	1902	Bendixsen SB. Co.
<i>Bowhead</i>	2m.Sch.	108	North Bend, Ore.	1891	
<i>C. A. Klose</i>	Sch.	407	Alameda, Calif.	1902	
<i>C. A. Thayer</i>	3m.Sch.	453	Fairhaven, Calif.	1895	Bendixsen
<i>C. C. Funk</i>	3m.Bktn	539	Marshfield, Ore.	1882	H. R. Reed
<i>C. S. Holmes</i>	4m.Sch.	430	Port Blakely, Wash.	1893	Hall Bros.
<i>C. T. Hill</i>	2m.Sch.	140	San Francisco, Calif.	1889	Hay
<i>California</i>	2m.Sch.	119	San Francisco, Calif.	1869	I. Hall
<i>Camano</i>	4m.Sch.	730	Port Blakely, Wash.	1902	Hall Bros.
<i>Canute</i>	2m.Sch.	118	San Francisco, Calif.	1882	Turner
<i>Caroline</i>	4m.Sch.	511	Port Blakely, Wash.	1902	Hall Bros.
<i>Carrier Dove</i>	4m.Sch.	707	Port Blakely, Wash.	1890	Hall Bros.
<i>Cassandra Adams</i>	Bark	1127	Seabeck, Wash.	1876	Doncaster
<i>Cassie Hayward</i>	2m.Sch.	197	Port Ludlow, Wash.	1875	Hall Bros.
<i>Catharine Sudden</i>	3m.Bktn	386	Port Ludlow, Wash.	1878	Hall Bros.
<i>Cecilia Sudden</i>	4m.Sch.	643	Fairhaven, Calif.	1902	Bendixsen SB. Co.
<i>Challenger</i>	3m.Sch.	279	Eureka, Calif.	1883	
<i>Charles Hanson</i>	2m.Sch.	192	Eureka, Calif.	1881	Bendixsen
<i>Charles E. Falk</i>	3m.Sch.	298	Fairhaven, Calif.	1889	
<i>Charles F. Crocker</i>	4m.Bkne	855	Alameda, Calif.	1890	White
<i>Charles H. Merchant</i>	3m.Sch.	283	Marshfield, Ore.	1877	H. R. Reed
<i>Charles R. Wilson</i>	3m.Sch.	345	Fairhaven, Calif.	1892	Bendixsen
<i>Charlotte Frances</i>	Brig	126(o)	San Francisco, Calif.	1863	Farnum
<i>Chehalis</i>	4m.Bktn	690	Hoquiam, Wash.	1891	T. McDonald
<i>Chetco</i>	2m.Sch.	106	Benicia, Calif.	1887	Turner
<i>Churchill</i>	4m.Sch.	655	North Bend, Ore.	1900	Simpson
<i>City of Papeete</i>	3m.Bktn	389	Fairhaven, Calif.	1883	Bendixsen
<i>Clara Light</i>	2m.Sch.	179	Steilacoom, Wash.	1868	
<i>Claus Spreckels</i>	2m.Sch.	246	San Francisco, Calif.	1879	Turner
<i>Columbia</i>	4m.Sch.	684	Hoquiam, Wash.	1899	Hitchings
<i>Comet</i>	3m.Sch.	429	Port Blakely, Wash.	1886	Hall Bros.
<i>Commerce</i>	4m.Sch.	658	Alameda, Calif.	1900	Hay & Wright
<i>Compeer</i>	3m.Sch.	347	Fairhaven, Calif.	1877	Bendixsen
<i>Consuelo</i>	Bgtn	293	San Francisco, Calif.	1880	Turner
<i>Coquille</i>	Sch.	103	Coquille River, Ore.	1883	
<i>Cora</i>	Sch.	155	Port Orchard, Wash.	1867	
<i>Corona</i>	3m.Sch.	394	Port Blakely, Wash.	1883	Hall Bros.
<i>Courser</i>	3m.Sch.	357	Port Ludlow, Wash.	1876	Hall Bros.
<i>Courtney Ford</i>	Brig	401	Benicia, Calif.	1883	Turner

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NAME	RIG	TONS	PLACE BUILT	YEAR	BUILDER
Crescent	5m.Sch.	1443	Fairhaven, Calif.	1904	Bendixsen SB. Co.
Czar	2m.Sch.	144	San Francisco, Calif.	1881	Turner
Czarina	3m.Sch.	230	Fairhaven, Calif.	1891	
D. C. Haskins	2m.Sch.	112	Vallejo, Calif.	1869	Benj. Walls
Daisy Rowe	2m.Sch.	122	Humboldt Bay, Calif.	1879	Bendixsen
Dakota	3m.Sch.	335	Marshfield, Ore.	1881	H. R. Reed
Dare	3m.Sch.	259	North Bend, Ore.	1882	Simpson
Dashing Wave	2m.Sch.	148	Eureka, Calif.	1867	Bendixsen
Dauntless	4m.Sch.	548	Hoquiam, Wash.	1898	Hitchings
David Evans	4m.Sch.	821	Marshfield, Ore.	1901	Pacific SB. Co.
Defender	4m.Sch.	446	Fairhaven, Calif.	1896	Bendixsen
Defiance	4m.Sch.	604	Hoquiam, Wash.	1897	Mathews & Hitchings
Del Norte	2m.Sch.	100	Benicia, Calif.	1887	Turner
Discovery	3m.Bktn.	415	Port Discovery, Wash.	1874	Murray
Dora Bluhm	3m.Sch.	330	Port Blakely, Wash.	1883	Hall Bros.
Dreadnaught	Sch.	183	Port Madison, Wash.	1866	
E. B. Jackson	4m.Sch.	682	Aberdeen, Wash.	1901	Lindstrom
E. K. Wood	4m.Sch.	520	Port Blakely, Wash.	1888	Hall Bros.
Echo	4m.Bktn.	707	North Bend, Ore.	1896	Simpson
Edward Parke	2m.Sch.	147	Eureka, Calif.	1877	
Edward R. West	4m.Sch.	835	Aberdeen, Wash.	1902	McWhinney
Eldorado	4m.Sch.	881	Aberdeen, Wash.	1901	McWhinney
Elida	Sch.	179	Port Madison, Wash.	1868	
Eliza Miller	2m.Sch.	156	San Francisco, Calif.	1883	White
Ella	3m.Bktn.	259	Freeport, Wash.	1874	Bryant
Ella Johnson	2m.Sch.	112	Port Angeles, Wash.	1894	
Ella Laurena	Sch.	223	Portland, Ore.	1895	
Ellen Wood	Brig.		Umpqua, Ore.		
Elnorah	3m.Sch.	144	Newport, Ore.	1871	Jas. Munro
Elsie Iversen	2m.Sch.	122	Benicia, Calif.	1887	Turner
Elvenia	2m.Sch.	148	Humboldt, Calif.	1872	Bendixsen
Emma	2m.Sch.	112(o)	San Francisco, Calif.	1854	
Emma Augusta	3m.Bktn.	284	San Francisco, Calif.	1867	
Emma Claudina	3m.Sch.	195	San Francisco, Calif.	1882	Turner
Emma Utter	3m.Sch.	279	Port Ludlow, Wash.	1875	Hall Bros.
Encore	4m.Bktn.	651	North Bend, Ore.	1897	N. Bend Mill

<i>Endeavor</i>	4m.Sch.	565	Port Blakely, Wash.	1897	Hall Bros.
<i>Ensign</i>	4m.Sch.	618	Everett, Wash.	1904	White
<i>Enterprise</i>	2m.Sch.	189	North Bend, Ore.	1863	Howlett
<i>Eric</i>	4m.Sch.	574	Port Blakely, Wash.	1898	Hall Bros.
<i>Espada</i>	4m.Sch.	777	Fairhaven, Calif.	1902	Bendixsen SB. Co.
<i>Esther Buhne</i>	3m.Sch.	290	Fairhaven, Calif.	1887	Bendixsen
<i>Ethel Zane</i>	4m.Sch.	498	Eureka, Calif.	1891	Mathews
<i>Eureka</i>	3m.Bktn.	295	Humboldt Bay, Calif.	1868	Murray
<i>Eureka</i>	2m.Sch.	123	Benicia, Calif.	1887	Turner
<i>Eva</i>	3m.Sch.	277	Seabeck, Wash.	1880	Murray
<i>Excelsior</i>	3m.Sch.	348	Fairhaven, Calif.	1876	Bendixsen
<i>Expansion</i>	4m.Sch.	545	Alameda, Calif.	1900	Hay & Wright
<i>F. M. Slade</i>	4m.Sch.	737	Aberdeen, Wash.	1900	McWhinney
<i>F. S. Redfield</i>	3m.Sch.	469	Port Blakely, Wash.	1887	Hall Bros.
<i>Falcon</i>	3m.Sch.	205	Fairhaven, Calif.	1882	Bendixsen
<i>Fannie Adele</i>	3m.Sch.	234	San Francisco, Calif.	1883	Dickie Bros.
<i>Fanny</i>	2m.Sch.	170 (o)	San Francisco, Calif.	1861	Marcucci
<i>Fanny Dutard</i>	3m.Sch.	266	San Francisco, Calif.	1882	White
<i>Fanny Hare</i>	2m.Sch.	163	San Francisco, Calif.	1866	Jn. Daly
<i>Fanny Jane</i>	2m.Sch.	120	Coos Bay, Ore.	1869	J. Sutherland
<i>Fearless</i>	4m.Sch.	736	Hoquiam, Wash.	1900	Hitchings
<i>Fidelity</i>	3m.Sch.	192	Eureka, Calif.	1882	
<i>Forest Home</i>	4m.Sch.	763	Marshfield, Ore.	1900	Heuckendorff
<i>Forest Queen</i>	Bark.	511	Port Ludlow, Wash.	1869	Doncaster
<i>Forester</i>	4m.Sch.	663	Alameda, Calif.	1900	Hay & Wright
<i>Fortuna</i>	2m.Sch.	145	Fairhaven, Calif.	1886	
<i>Francis Alice</i>	2m.Sch.	131	St. Helens, Ore.	1881	W. J. Stevens
<i>Fred E. Sander</i>	3m.Sch.	463	Port Blakely, Wash.	1887	Hall Bros.
<i>Fred J. Wood</i>	4m.Sch.	681	Hoquiam, Wash.	1899	Hitchings
<i>Frithiof</i>	2m.Sch.	242	Marshfield, Ore.	1874	Holden
<i>Fullerton</i>	4m.Bktn.	1554	Alameda, Calif.	1902	Hay & Wright
<i>G. W. Prescott</i>	2m.Sch.	112	Little River, Calif.	1874	Peterson
<i>G. W. Watson</i>	3m.Sch.	452	Fairhaven, Calif.	1890	Bendixsen
<i>Galilee</i>	Bgtn.	354	Benicia, Calif.	1891	Turner
<i>Gamble</i>	4m.Sch.	726	Port Blakely, Wash.	1901	Hall Bros.
<i>Garcia</i>	2m.Sch.	116	San Francisco, Calif.	1882	Turner
<i>Gardiner City</i>	4m.Sch.	475	North Bend, Ore.	1889	
<i>Gem</i>	Sch.	120	Parkersburg, Ore.	1885	

NAME	RIG	TONS	PLACE BUILT	YEAR	BUILDER
Gen'l Banning	2m.Sch.	177	Navarro River, Calif.	1883	Peterson
General Miller	2m.Sch.	108	San Francisco, Calif.	1874	Middlemas & Boole
Geneva	Bgtn.	495	Benicia, Calif.	1892	Turner
George C. Perkins	3m.Bktn.	388	Marshfield, Ore.	1880	H. R. Reed
George E. Billings	5m.Sch.	1260	Port Blakely, Wash.	1903	Hall Bros.
Geo. P. Haub	Sch.	122	San Francisco, Calif.	1876	Buchart
Georgina	4m.Bktn.	998	Fairhaven, Calif.	1901	Bendixsen SB. Co.
Gleaner	3m.Bktn.	413	Hoquiam, Wash.	1892	T. McDonald
Glen	2m.Sch.	127	Marshfield, Ore.	1883	H. R. Reed
Glendale	3m.Sch.	296	Fairhaven, Calif.	1888	Bendixsen
Golden Fleece	2m.Sch.	127	Humboldt, Calif.	1875	
Golden Shore	4m.Sch.	699	Port Blakely, Wash.	1889	Hall Bros.
Good Templar	Sch.	126	Steilacoom, Wash.	1866	
Gotoma	2m.Sch.	198	North Bend, Ore.	1872	Murray
Grace Roberts	3m.Bktn.	268	Port Orchard, Wash.	1868	Roberts
Greyhound	2m.Sch.	148	San Francisco, Calif.	1869	J. E. Thayer
Guide	3m.Sch.	144	San Francisco, Calif.	1887	Farnum
H. C. Wright	3m.Sch.	290	Fairhaven, Calif.	1889	
H. D. Bendixsen	4m.Sch.	641	Fairhaven, Calif.	1898	Bendixsen
H. K. Hall	5m.Sch.	1237	Port Blakely, Wash.	1902	Hall Bros.
H. L. Tiernan	2m.Sch.	153	San Francisco, Calif.	1867	Tiernan
Halcyon	3m.Sch.	293	Eureka, Calif.	1881	
Hannah Madison	2m.Sch.	134	Little River, Calif.	1876	Peterson
Harriet	Sch.	118	Ballard, Wash.	1900	
Harriet Rowe	Sch.	114	San Francisco, Calif.	1866	Taylor & Rowe
Hayes	2m.Sch.	194	Umpqua, Ore.	1876	J. Kruse
Helen	2m.Sch.	121 (o)	Point Arena, Calif.	1864	Hamilton
Helen N. Kimball	2m.Sch.	192	Cuffey's Cove, Calif.	1881	Peterson
Helene	4m.Sch.	927	Port Blakely, Wash.	1900	Hall Bros.
Henry Wilson	4m.Sch.	472	Aberdeen, Wash.	1899	Lindstrom
Herman	2m.Sch.	105	Benicia, Calif.	1890	Turner
Hesper	Bark	695	Port Blakely, Wash.	1882	Hall Bros.
Hesperian	Brig.	241	Eureka, Calif.	1865	E. & H. Cousins
Hilo	3m.Bktn.	644	Fairhaven, Calif.	1892	
Honoipu	4m.Sch.	564	Alameda, Calif.	1898	Hay & Wright
Howard	2m.Sch.	125	San Francisco, Calif.	1881	Dickie Bros.
Hueneme	3m.Sch.	364	Port Ludlow, Wash.	1877	Hall Bros.

Hugh Hogan	3m.Sch.	392	Marshfield, Ore.	1904	Kruse & Banks
Humboldt	2m.Sch.	138	Eureka, Calif.	1874	Bendixsen
Ida McKay	3m.Sch.	187	Fairhaven, Calif.	1880	Bendixsen
Ida Schnauer	2m.Sch.	215	Port Ludlow, Wash.	1875	Hall Bros.
Inca	5m.Sch.	1014	Port Blakely, Wash.	1896	Hall Bros.
Irene	4m.Sch.	772	Fairhaven, Calif.	1900	Bendixsen
Irmgard	3m.Bktn.	670	Port Blakely, Wash.	1889	Hall Bros.
Isabel	2m.Sch.	184	North Bend, Ore.	1864	Howlett
Ivanhoe	2m.Sch.	119	Marshfield, Ore.	1869	
Ivy	2m.Sch.	142	San Francisco, Calif.	1882	Dickie Bros.
J. Eppinger	2m.Sch.	112	San Francisco, Calif.	1887	White
J. B. Ford	2m.Sch.	196	San Francisco, Calif.	1860	
J. B. Leeds	2m.Sch.	229	Umpqua, Ore.	1876	Doncaster
J. C. Ford	3m.Sch.	242	San Francisco, Calif.	1882	Turner
J. H. Lunsmann	4m.Sch.	1090	Everett, Wash.	1902	White
J. J. Fransen	2m.Sch.	120	San Francisco, Calif.	1867	Fransen
J. M. Colman	3m.Sch.	463	Port Blakely, Wash.	1888	Hall Bros.
J. M. Griffith	3m.Bktn.	606	Seabeck, Wash.	1882	
J. M. Weatherwax	3m.Sch.	384	Aberdeen, Wash.	1890	J. M. Weatherwax
J. W. Clise	4m.Sch.	845	Ballard, Wash.	1904	T. C. Reed
James Johnson	4m.Bktn.	1149	Seattle, Wash.	1901	Moran Bros. Co.
James Rolph	4m.Sch.	586	Fairhaven, Calif.	1899	
James Sennett	4m.Sch.	766	Marshfield, Ore.	1901	
James Townsend	3m.Sch.	168	Noyo, Calif.	1867	Peterson
James Tuft	4m.Bktn.	1274	Port Blakely, Wash.	1901	Hall Bros.
James A. Garfield	3m.Sch.	316	North Bend, Ore.	1881	J. Kruse
James H. Bruce	4m.Sch.	533	Fairhaven, Calif.	1898	Bendixsen
Jane L. Stanford	4m.Bktn.	970	Fairhaven, Calif.	1892	Bendixsen
Jennie Stella	3m.Sch.	292	Marshfield, Ore.	1876	H. R. Reed
Jennie Thelin	2m.Sch.	145	Davenport Landing, Calif.	1869	O. Reed
Jennie Walker	2m.Sch.	137	Port Ludlow, Wash.	1880	Hall Bros.
Jennie Wand	3m.Sch.	171	Marshfield, Ore.	1883	H. R. Reed
Jessie Minor	3m.Sch.	261	Fairhaven, Calif.	1883	Bendixsen
Jessie Nickerson	2m.Sch.	184	Port Ludlow, Wash.	1874	Hall Bros.
Johanna M. Brock	2m.Sch.	134	Little River, Calif.	1876	Peterson
John A.	3m.Sch.	282	Eureka, Calif.	1893	Mathews
John Palmer	4m.Bktn.	1187	Fairhaven, Calif.	1900	Bendixsen
John Smith	3m.Bktn.	588	Port Blakely, Wash.	1882	Hall Bros.

NAME	RIG	TONS	PLACE BUILT	YEAR	BUILDER
John A. Campbell	4m.Sch.	545	Port Blakely, Wash.	1895	Hall Bros.
John C. Meyer	4m.Bktn.	932	Tacoma, Wash.	1902	Banks
John D. Spreckels	Bgtn.	266	San Francisco, Calif.	1880	Turner
John D. Tallant	4m.Sch.	561	Alameda, Calif.	1892	Hay
John F. Miller	2m.Sch.	179	San Francisco, Calif.	1882	Mortensen
John G. North	3m.Sch.	336	Marshfield, Ore.	1881	H. R. Reed
Joseph Perkins	3m.Bktn.	296	Vallejo, Calif.	1875	J. Perkins
Joseph Russ	3m.Sch.	247	Eureka, Calif.	1881	E. Cousins
Jos. L. Eviston	3m.Bktn.	755	Marshfield, Ore.	1900	Heuckendorff
Juventa	2m.Sch.	191	North Bend, Ore.	1865	Howlett
Kailua	4m.Sch.	736	Hoquiam, Wash.	1901	
Katie Flickenger	3m.Bktn.	472	Seattle, Wash.	1876	Bryant
Kauikeaouli	2m.Sch.	140	Port Ludlow, Wash.	1879	Hall Bros.
King Cyrus	4m.Sch.	717	Port Blakely, Wash.	1890	Hall Bros.
Kitsap	3m.Bktn.	693	Port Ludlow, Wash.	1881	
Kitsap	4m.Sch.	791	Port Ludlow, Wash.	1887	
Kittie Stevens	2m.Sch.	130	San Francisco, Calif.	1868	Fransen
Klikitat	3m.Bktn.	493	North Bend, Ore.	1881	J. Kruse
Kodiak	2m.Sch.	102	San Francisco, Calif.	1881	Turner
Kodiak	2m.Sch.	146	Benicia, Calif.	1895	Turner
Kohala	4m.Bktn.	891	Fairhaven, Calif.	1901	Bendixsen SB. Co.
Koko Head	4m.Bktn.	1084	Oakland, Calif.	1902	W. A. Boole
Kona	4m.Sch.	679	Alameda, Calif.	1901	Hay & Wright
La Gironde	2m.Sch.	204	Port Ludlow, Wash.	1875	Hall Bros.
Lahaina	4m.Bktn.	1067	Oakland, Calif.	1901	W. A. Boole
Laura Madsen	3m.Sch.	345	Gardiner, Ore.	1882	Holden
Laura May	2m.Sch.	127	Eureka, Calif.	1868	E. & H. Cousins
Laura May	3m.Sch.	246	Marshfield, Ore.	1875	H. R. Reed
Laura Pike	2m.Sch.	145	Eureka, Calif.	1875	Bendixsen
Legal Tender	Bark.	210	Port Madison, Wash.	1863	
Lena Sweasey	3m.Sch.	256	Eureka, Calif.	1875	Bendixsen
Lila and Mattie	2m.Sch.	105	Albion River, Calif.	1888	J. F. Petersen
Lillebonne	2m.Sch.	218	Eureka, Calif.	1883	E. Cousins
Lily	2m.Sch.	142	San Francisco, Calif.	1882	Dickie Bros.
Lizzie Madison	2m.Sch.	131	Humboldt, Calif.	1876	Bendixsen
Lizzie Marshall	Bark.	454	Maine Prairie, Calif.	1877	Mortensen

Lizzie Vance	3m.Sch.	442	Port Blakely, Wash.	1887	Hall Bros.
Lola	Sch.	192	Port Madison, Wash.	1865	
Loleta	2m.Sch.	119	Seattle, Wash.	1871	Hammond
Lottie Bennett	4m.Sch.	566	Port Blakely, Wash.	1899	Hall Bros.
Lottie Carson	3m.Sch.	286	Port Blakely, Wash.	1881	Hall Bros.
Louis	5m.Sch.	831	North Bend, Ore.	1888	J. Kruse
Louise	3m.Sch.	346	Fairhaven, Calif.	1892	Bendixsen
Lucy	3m.Sch.	309	Fairhaven, Calif.	1890	Bendixsen
Ludlow	4m.Sch.	762	Port Blakely, Wash.	1900	Hall Bros.
Lurline	Bgtn.	358	Benicia, Calif.	1887	Turner
Luzon	4m.Sch.	545	Alameda, Calif.	1900	Hay & Wright
Lyman D. Foster	4m.Sch.	777	Port Blakely, Wash.	1892	Hall Bros.
M. Turner	4m.Sch.	816	Benicia, Calif.	1902	Turner
Mabel Gale	4m.Sch.	762	Port Blakely, Wash.	1902	Hall Bros.
Mabel Gray	3m.Sch.	205	Fairhaven, Calif.	1882	Bendixsen
Maggie Johnston	2m.Sch.	133	Navarro, Calif.	1866	Bryant
Maggie C. Russ	3m.Sch.	196	Eureka, Calif.	1881	E. Cousins
Mahukona	4m.Sch.	738	Hoquiam, Wash.	1901	Hitchings
Maid of Orleans	2m.Sch.	180	San Francisco, Calif.	1882	Dickie Bros.
Makah	3m.Bktn.	699	Port Blakely, Wash.	1882	Hall Bros.
Makaweli	4m.Bktn.	899	Oakland, Calif.	1902	W. A. Boole
Malolo	2m.Sch.	133	Port Ludlow, Wash.	1879	Hall Bros.
Manila	4m.Sch.	731	North Bend, Ore.	1899	Simpson
Marconi	4m.Sch.	693	North Bend, Ore.	1902	
Margaret Crockard	Sch.	169	Port Madison, Wash.	1870	Bryant
Maria E. Smith	3m.Sch.	365	Port Blakely, Wash.	1881	Hall Bros.
Maria G. Atkins	2m.Sch.	100	Point Arena, Calif.	1868	Hamilton
Marietta	Sch.	142	Port Discovery, Wash.	1872	J. Foster
Marion	2m.Sch.	235	San Francisco, Calif.	1882	Turner
Martha W. Tuft	2m.Sch.	173	Eureka, Calif.	1876	Bendixsen
Mary Buhne	2m.Sch.	147	Eureka, Calif.	1876	Bendixsen
Mary Dodge	3m.Sch.	243	Eureka, Calif.	1882	Murray
Mary Swann	2m.Sch.	143	Eureka, Calif.	1875	Bendixsen
Mary Winkelman	3m.Bktn.	522	Seabeck, Wash.	1881	Doncaster
Mary D. Pomeroy	2m.Sch.	114	Little River, Calif.	1879	Peterson
Mary E. Foster	2m.Sch.	116	Port Ludlow, Wash.	1877	Hall Bros.
Mary E. Foster	4m.Sch.	950	Port Blakely, Wash.	1898	Hall Bros.
Mary E. Russ	Sch.	235	Eureka, Calif.	1875	E. Cousins
Mary and Ida	2m.Sch.	183	San Francisco, Calif.	1882	Dickie Bros.

NAME	RIG	TONS	PLACE BUILT	YEAR	BUILDER
<i>Maweeema</i>	3m.Sch.	453	Fairhaven, Calif.	1895	Bendixsen
<i>Maxim</i>	2m.Sch.	117	Humboldt Bay, Calif.	1876	Bendixsen
<i>May Queen</i>	2m.Sch.	123	Eureka, Calif.	1867	E. & H. Cousins
<i>Melancthon</i>	3m.Bktn.	298	North Bend, Ore.	1867	Murray
<i>Melrose</i>	4m.Sch.	615	Hoquiam, Wash.	1902	Hitchings
<i>Meteor</i>	4m.Sch.	600	Port Blakely, Wash.	1891	Hall Bros.
<i>Metha Nelson</i>	3m.Sch.	460	Fairhaven, Calif.	1896	Bendixsen
<i>Mildred</i>	3m.Sch.	464	Fairhaven, Calif.	1897	Bendixsen
<i>Mindoro</i>	4m.Sch.	679	Alameda, Calif.	1901	Hay & Wright
<i>Mina Bell</i>	Sch.	123	San Francisco, Calif.	1865	Bell
<i>Minnie A. Caine</i>	4m.Sch.	880	Seattle, Wash.	1900	Moran Bros. Co.
<i>Modoc</i>	3m.Bkne.	452	Utsalady, Wash.	1873	Geo. Boole
<i>Monitor</i>	3m.Bktn.	235	San Francisco, Calif.	1862	Marcucci
<i>Monterey</i>	2m.Sch.	126	Benicia, Calif.	1887	Turner
<i>Moro</i>	Sch.	111	Alameda, Calif.	1894	
<i>Muriel</i>	4m.Sch.	537	Alameda, Calif.	1895	Hay & Wright
<i>N. L. Drew</i>	2m.Sch.	120	San Francisco, Calif.	1869	Nichols
<i>Nanaimo</i>	Bark.	407	Nanaimo, B. C.	1882	Alex. Allen
<i>Nautilus</i>	Brig.	173	Eureka, Calif.	1868	Turner & Cousins
<i>Neptune</i>	2m.Sch.	184	Fairhaven, Calif.	1882	
<i>Newark</i>	2m.Sch.	120	Benicia, Calif.	1887	Turner
<i>Newsboy</i>	Bark.	588	San Francisco, Calif.	1882	Dickie Bros.
<i>Nokomis</i>	4m.Sch.	545	Port Blakely, Wash.	1895	Hall Bros.
<i>Nomad</i>	4m.Sch.	565	Port Blakely, Wash.	1897	Hall Bros.
<i>Nome</i>	2m.Sch.	231	Benicia, Calif.	1900	Turner
<i>Nora Harkins</i>	2m.Sch.	209	Parkersburg, Ore.	1882	
<i>Norma</i>	3m.Sch.	326	San Francisco, Calif.	1883	White
<i>North Bend</i>	3m.Bktn.	376	North Bend, Ore.	1877	J. Kruse
<i>Northwest</i>	Bark.	515	Port Madison, Wash.	1868	Bryant
<i>Norway</i>	2m.Sch.	192	San Francisco, Calif.	1870	Bell
<i>Novelty</i>	4m.Sch.	592	North Bend, Ore.	1886	Simpson
<i>Noyo</i>	Sch.	195 (o)	San Francisco, Calif.	1861	J. C. Cousins
<i>O. M. Kellogg</i>	3m.Sch.	393	Fairhaven, Calif.	1892	
<i>Oakland</i>	3m.Sch.	418	San Francisco, Calif.	1902	Stone
<i>Occident</i>	3m.Bktn.	297	North Bend, Ore.	1865	Simpson
<i>Occidental</i>	3m.Bktn.	209	Fairhaven, Calif.	1884	Bendixsen

<i>Ocean Pearl</i>	Sch.	195	Navarro, Calif.	1868	
<i>Oceania Vance</i>	3m.Sch.	445	Port Blakely, Wash.	1888	Hall Bros.
<i>Okanogan</i>	4m.Sch.	721	Port Blakely, Wash.	1895	Hall Bros.
<i>Olga</i>	4m.Sch.	408	Eureka, Calif.	1889	Bendixsen
<i>Oliver J. Olson</i>	4m.Sch.	667	Aberdeen, Wash.	1900	Lindstrom
<i>Olympus</i>	Ship	1110	Seabeck, Wash.	1880	Doncaster
<i>Omega</i>	Bktn	584	North Bend, Ore.	1894	
<i>Oregon</i>	3m.Sch.	343	Prosper, Ore.	1905	Heuckendorff
<i>Oregonian</i>	Sch.	246	North Bend, Ore.	1872	J. Kruse
<i>Orion</i>	2m.Sch.	117	Humboldt Bay, Calif.	1878	Bendixsen
<i>Otelia Pedersen</i>	4m.Sch.	789	Everett, Wash.	1901	White
<i>Ottlie Fjord</i>	3m.Sch.	261	Fairhaven, Calif.	1892	Bendixsen
<i>Pacific</i>	Sch.	148	Umpqua, Ore.	1865	J. Kruse
<i>Pacific Slope</i>	Bark	824	San Francisco, Calif.	1875	Middlemas & Boole
<i>Paloma</i>	Brig.	223	Humboldt, Calif.	1875	Bendixsen
<i>Pannonia</i>	2m.Sch.	206	Marshfield, Ore.	1875	H. R. Reed
<i>Papeete</i>	2m.Sch.	127	Benicia, Calif.	1891	M. Turner
<i>Parallel</i>	2m.Sch.	148	San Francisco, Calif.	1868	
<i>Parkersburg</i>	2m.Sch.	123	Parkersburg, Ore.	1883	Parker
<i>Pathfinder</i>	Sch.	105	Astoria, Ore.	1891	
<i>Peerless</i>	3m.Sch.	244	Gardiner, Ore.	1878	Peterson
<i>Phil Sheridan</i>	2m.Sch.	158	Little River, Calif.	1868	Peterson
<i>Philippine</i>	4m.Sch.	523	Alameda, Calif.	1899	Hay & Wright
<i>Pio Benito</i>	3m.TS.Sch.	277	Port Ludlow, Wash.	1873	Hall Bros.
<i>Pioneer</i>	3m.Sch.	418	Hoquiam, Wash.	1886	T. McDonald
<i>Pitcairn</i>	2m.Sch.	121	Benicia, Calif.	1890	Turner
<i>Planter</i>	3m.Bktn	524	Port Ludlow, Wash.	1886	Murray
<i>Polaris</i>	4m.Sch.	790	Marshfield, Ore.	1902	
<i>Portland</i>	3m.Bktn	493	North Bend, Ore.	1873	J. Kruse
<i>Premier</i>	3m.Sch.	307	Port Ludlow, Wash.	1876	Hall Bros.
<i>Prosper</i>	4m.Sch.	605	Port Blakely, Wash.	1891	Hall Bros.
<i>Prosper</i>	3m.Sch.	241	Pershbaker's Mill, Ore.	1892	
<i>Puako</i>	4m.Bktn	1084	Oakland, Calif.	1902	W. A. Boole
<i>Puritan</i>	4m.Sch.	614	Port Madison, Wash.	1888	H. R. Reed
<i>Queen</i>	3m.Sch.	277	San Francisco, Calif.	1882	White
<i>Queen of the Bay</i>	2m.Sch.	107	Portland, Ore.	1883	
<i>Quickstep</i>	3m.Bktn	423	Port Ludlow, Wash.	1876	Hall Bros.

NAME	RIG	TONS	PLACE BUILT	YEAR	BUILDER
R. C. Slade.....	4m.Sch.....	673.....	Aberdeen, Wash.	1900	Lindstrom
R. K. Ham.....	3m.Bktn.....	569.....	Port Blakely, Wash.	1874	Bryant
R. W. Bartlett.....	4m.Sch.....	521.....	Fairhaven, Calif.	1891	
Rebecca	2m.Sch.....	161.....	Empire City, Ore.	1875	Murray
Repeat	3m.Sch.....	455.....	North Bend, Ore.	1897	Simpson
Reporter	3m.Sch.....	350.....	Port Ludlow, Wash.	1876	Hall Bros.
Resolute	4m.Sch.....	684.....	Hoquiam, Wash.	1902	Hitchings
Retriever	3m.Bktn.....	547.....	Seabeck, Wash.	1881	Doncaster
Robert Cowan	Brig.....	220(o).....	Sooke, B. C.	1867	
Robert Lewers	4m.Sch.....	732.....	Port Blakely, Wash.	1889	Hall Bros.
Robert Searles	4m.Sch.....	608.....	Port Blakely, Wash.	1888	Hall Bros.
Robert Sudden	3m.Bktn.....	616.....	Port Blakely, Wash.	1887	Hall Bros.
Robert R. Hind	4m.Sch.....	564.....	Alameda, Calif.	1899	Hay & Wright
Rosalind	3m.TS.Sch.....	288.....	Port Blakely, Wash.	1883	Hall Bros.
Rosamond	4m.Sch.....	1030.....	Benicia, Calif.	1900	Turner
Rosario	2m.Sch.....	148.....	San Francisco, Calif.	1878	Turner
Roy Somers	3m.Sch.....	314.....	Fairhaven, Calif.	1891	Bendixsen
Ruby	3m.Sch.....	345.....	Alameda, Calif.	1902	J. W. Dickie
Ruby A. Cousins.....	3m.Sch.....	192.....	Eureka, Calif.	1882	E. Cousins
Ruth E. Godfrey.....	4m.Sch.....	597.....	Port Blakely, Wash.	1900	Hall Bros.
S. G. Wilder.....	3m.Bktn.....	604.....	Port Blakely, Wash.	1889	Hall Bros.
S. M. Stetson.....	Bktn.....	707.....	Port Madison, Wash.	1874	Reed Bros.
S. N. Castle.....	3m.Bktn.....	514.....	Port Blakely, Wash.	1886	Hall Bros.
S. T. Alexander.....	4m.Sch.....	779.....	Fairhaven, Calif.	1899	Bendixsen
Sacramento	2m.Sch.....	130.....	San Francisco, Calif.	1868	
Sadie	3m.Sch.....	310.....	Fairhaven, Calif.	1890	Bendixsen
Sailor Boy	3m.Sch.....	328.....	Southbend, Wash.	1883	Patterson
St. George	2m.Sch.....	100.....	San Francisco, Calif.	1878	Turner
Salem	4m.Sch.....	767.....	San Francisco, Calif.	1902	Stone
Salvator	4m.Sch.....	467.....	Eureka, California	1890	
Samar	4m.Sch.....	710.....	Alameda, Calif.	1901	Hay & Wright
Samson	2m.Sch.....	217.....	Alameda, Calif.	1890	Hay
San Buenaventura	2m.Sch.....	180.....	Fairhaven, Calif.	1876	Bendixsen
Santa Paula	4m.Sch.....	650.....	Fairhaven, Calif.	1900	Bendixsen
Sarah	2m.Sch.....	105.....	Utsalady, Wash.	1861	J. W. Crowell
Sausalito	3m.Sch.....	367.....	San Francisco, Calif.	1903	Stone
Sehome	4m.Sch.....	680.....	New Whatcom, Wash.	1900	C. E. Sutton

<i>Selina</i>	Bgtn.	349	San Francisco, Calif.	1883	Turner
<i>Sequoia</i>	3m.Sch.	341	Fairhaven, Calif.	1890	Bendixsen
<i>Serena Thayer</i>	2m.Sch.	206	Port Discovery, Wash.	1872	
<i>Seven Sisters</i>	2m.Sch.	129	Benicia, Calif.	1888	Turner
<i>Siberia</i>	Brig.	126	San Francisco, Calif.	1876	Turner
<i>Skagit</i>	3m.Bktn.	506	Port Ludlow, Wash.	1883	Doncaster
<i>Solano</i>	4m.Sch.	728	Benicia, Calif.	1901	Turner
<i>Sophia Sutherland</i>	3m.Sch.	156	Tacoma, Wash.	1889	
<i>Sophie Christenson</i>	4m.Sch.	675	Port Blakely, Wash.	1901	Hall Bros.
<i>Soquel</i>	4m.Sch.	767	San Francisco, Calif.	1902	Stone
<i>Sparrow</i>	2m.Sch.	197	Oakland, Calif.	1869	Allen
<i>Spokane</i>	4m.Sch.	639	Port Blakely, Wash.	1890	Hall Bros.
<i>Stag Hound</i>	2m.Sch.	136	Marshfield, Ore.	1868	Howlett
<i>Staghound</i>	2m.Sch.	151	Alameda, Calif.	1890	Hay
<i>Stanley</i>	3m.Sch.	355	Fairhaven, Calif.	1900	
<i>State of Sonora</i>	Sch.	329	Seabeck, Wash.	1880	
<i>Stimson</i>	4m.Sch.	693	Ballard, Wash.	1900	T. C. Reed
<i>Stranger</i>	2m.Sch.	124	San Francisco, Calif.	1869	W. G. Hall
<i>Sunshine</i>	Sch.	326	Marshfield, Ore.	1875	Holden
<i>Susan and Kate Deming</i>	3m.Sch.		San Francisco, Calif.	1854	North
<i>Susie Merrill</i>	3m.Sch.	148	Noyo, Calif.	1866	Peterson
<i>Tahiti</i>	Bgtn.	290	San Francisco, Calif.	1881	Turner
<i>Tam O'Shanter</i>	3m.Bktn.	592	North Bend, Ore.	1875	Simpson
<i>Tamaru Tahiti</i>	Sch.	145	Benicia, Calif.	1889	Turner
<i>Tarawa</i>	2m.Sch.	152	San Francisco, Calif.	1890	Hay
<i>Taurus</i>	4m.Sch.	551	Marshfield, Ore.	1902	Pacific SB. Co.
<i>Teavaroa</i>	Sch.	110	Benicia, Calif.	1892	Turner
<i>Thomas</i>	Brig.	115	San Francisco, Calif.	1867	North
<i>Thomas P. Emigh</i>	4m.Bktn.	1040	Tacoma, Wash.	1901	Tacoma SB. Co.
<i>Tidal Wave</i>	Bark.	603	Port Madison, Wash.	1869	Bryant
<i>Tolo</i>	Sch.	123	Port Ludlow, Wash.	1861	
<i>Transit</i>	4m.Sch.	547	Ballard, Wash.	1891	Peterson
<i>Tropic Bird</i>	3m.Bktn.	347	North Bend, Ore.	1882	J. Kruse
<i>Truckee</i>	2m.Sch.	147	San Francisco, Calif.	1869	Tiernan
<i>Trustee</i>	3m.Sch.	280	North Bend, Ore.	1878	J. Kruse
<i>Twilight</i>	2m.Sch.	184	Port Ludlow, Wash.	1874	Hall Bros.

NAME	RIG	TONS	PLACE BUILT	YEAR	BUILDER
<i>Una</i>	3m.Sch.....	207.....	Port Blakely, Wash.	1874	Bryant
<i>Uncle John</i>	3m.Bktn.....	314.....	Eureka, Calif.	1881	Murray
<i>Uncle Sam</i>	2m.Sch.....	113.....	Big River, Calif.....	1873	Peterson
<i>Undine</i>	2m.Sch.....	144.....	Eureka, Calif.	1870	Bendixsen
<i>Uranus</i>	3m.Sch.....	152.....	San Francisco, Calif.....	1894	
<i>Vega</i>	3m.Sch.....	245.....	Fairhaven, Calif.	1881	Bendixsen
<i>Venus</i>	2m.Sch.....	118.....	Point Arena, Calif.....	1874	Jacob Whitehouse
<i>Vesta</i>	3m.Sch.....	285.....	San Francisco, Calif.....	1882	Turner
<i>Viking</i>	2m.Sch.....	146.....	Marshfield, Ore.	1882	H. R. Reed
<i>Vine</i>	2m.Sch.....	228.....	Gig Harbor, Wash.....	1890	
<i>Virginia</i>	4m.Sch.....	585.....	Alameda, Calif.	1902	Hay & Wright
<i>Volant</i>	3m.Sch.....	172.....	Fairhaven, Calif.	1883	Bendixsen
<i>Volante</i>	2m.Sch.....	125.....	North Bend, Ore.....	1891	G. L. Hobbs
<i>Volunteer</i>	4m.Sch.....	585.....	Hoquiam, Wash.	1887	T. McDonald
<i>W. F. Jewett</i>	3m.Sch.....	476.....	Port Ludlow, Wash.....	1887	Middlemas & Boole
<i>W. H. Dimond</i>	3m.Bktn.....	390.....	San Francisco, Calif.....	1881	Turner
<i>W. H. Marston</i>	5m.Sch.....	1169.....	San Francisco, Calif.....	1901	Stone
<i>W. H. Meyer</i>	2m.Sch.....	246.....	San Francisco, Calif.....	1869	Buchart
<i>W. H. Talbot</i>	4m.Sch.....	816.....	Port Blakely, Wash.....	1891	Hall Bros.
<i>W. J. Patterson</i>	4m.Sch.....	645.....	Aberdeen, Wash.	1901	Lindstrom
<i>W. S. Bowne</i>	3m.Sch.....	421.....	Port Blakely, Wash.....	1885	Hall Bros.
<i>W. S. Phelps</i>	2m.Sch.....	101.....	Port Madison, Wash.....	1870	Reed Bros.
<i>Watson A. West</i>	4m.Sch.....	818.....	Aberdeen, Wash.	1901	McWhinney
<i>Wawona</i>	3m.Sch.....	468.....	Fairhaven, Calif.	1897	Bendixsen
<i>Web Foot</i>	3m.Bktn.....	361.....	North Bend, Ore.....	1869	Simpson
<i>Western Belle</i>	3m.Bktn.....	275.....	Humboldt, Calif.	1867	E. & H. Cousins
<i>Western Home</i>	2m.Sch.....	135.....	Main Prairie, Calif.....	1874	Mortensen
<i>Western Shore</i>	Ship.....	1177.....	North Bend, Ore.....	1874	J. Kruse
<i>Wilbert L. Smith</i>	4m.Sch.....	848.....	Ballard, Wash.	1902	T. C. Reed
<i>Wildwood</i>	Ship.....	1099.....	Port Madison, Wash.....	1871	A. J. Westervelt
<i>Wm. Bowden</i>	4m.Sch.....	778.....	Port Blakely, Wash.....	1892	Hall Bros.
<i>William Carson</i>	Bktn.....	890.....	Fairhaven, Calif.	1899	
<i>Wm. Nottingham</i>	4m.Sch.....	1204.....	Ballard, Wash.	1902	T. C. Reed
<i>William Olsen</i>	4m.Sch.....	523.....	Alameda, Calif.	1900	Hay & Wright
<i>William Renton</i>	3m.Sch.....	447.....	Port Blakely, Wash.....	1882	Hall Bros.
<i>William F. Bowne</i>	Sch.....	136.....	Umpqua, Ore.	1864	J. Kruse

<i>Wm. F. Garms</i>	4m.Sch.	1094	Everett, Wash.	1901	White
<i>Wm. F. Witsemann</i>	4m.Sch.	473	Fairhaven, Calif.	1887	
<i>William G. Irwin</i>	Bgtn.	348	San Francisco, Calif.	1881	Turner
<i>Wm. H. Smith</i>	4m.Sch.	566	Port Blakely, Wash.	1899	Hall Bros.
<i>Wm. H. Stevens</i>	2m.Sch.	146	San Francisco, Calif.	1869	J. McDonald
<i>William L. Beebe</i>	3m.Sch.	296	Port Ludlow, Wash.	1875	Hall Bros.
<i>Willie R. Hume</i>	4m.Bktn.	665	North Bend, Ore.	1890	
<i>Willis A. Holden</i>	4m.Sch.	1188	Ballard, Wash.	1902	T. C. Reed
<i>Winchester</i>	2m.Sch.	118	Prosper, Ore.	1893	
<i>Wing & Wing</i>	2m.Sch.	141	San Francisco, Calif.	1881	White
<i>Winslow</i>	4m.Sch.	566	Port Blakely, Wash.	1899	Hall Bros.
<i>Wrestler</i>	3m.Bktn.	470	Port Ludlow, Wash.	1880	Hall Bros.
<i>York</i>	2m.Sch.	231	Benicia, Calif.	1900	Turner
<i>Z. B. Heywood</i>	2m.Sch.	107	Port Ludlow, Wash.	1873	I. Hall
<i>Zampa</i>	3m.Sch.	385	Port Madison, Wash.	1887	Hughes

SAILING VESSELS OF PACIFIC COAST AND BUILDERS

TABLE 1
VESSELS BUILT BY FIVE-YEAR INTERVALS

YEARS	NUMBER	GROSS TONNAGE
Unknown	1
1851-55	2
1856-60	4
1861-65	19
1866-70	57	10,795
1871-75	55	14,826
1876-80	48	13,208
1881-85	90	25,599
1886-90	70	26,862
1891-95	47	20,684
1896-1900	66	40,398
1901-05	76	61,073

TABLE 2

RIG		DISTRIBUTION BY RIGS		LARGEST TONNAGE	
	NUMBER	SMALLEST	TONNAGE		
Ships	3	<i>Wildwood</i>	1099	<i>Western Shore</i>	1177
Barks	11	<i>Legal Tender</i>	210	<i>Cass. Adams</i>	1127
Four-mast Bktns. .	24	<i>Arago</i>	498	<i>Fullerton</i>	1554
Three-mast Bktns. .	46	<i>Monitor</i>	235	<i>Jos. L. Eviston</i>	755
Brigs and Bgtns. .	21			<i>Geneva</i>	495
Five-mast Schs. . .	6	<i>Louis</i>	831	<i>Crescent</i>	1443
Four-mast Schs. . .	130	<i>C. S. Holmes</i>	430	<i>Wm. Nottingham</i> . .	1204
Three-mast Schs. . .	112	<i>Guide</i>	144	<i>W. F. Jewett</i>	476
Two-mast Schs. . .	182			<i>Claus Spreckels</i>	246

TABLE 3

GEOGRAPHICAL DISTRIBUTION

CALIFORNIA	257
Southern California	1
San Francisco Bay	138
Mendocino	18
Humboldt Bay	100
OREGON	90
Coos Bay	67
Columbia River	4
Elsewhere	19
WASHINGTON	186
Grays Harbor	28
Puget Sound	157
Elsewhere	1
BRITISH COLUMBIA	2
Vancouver Island	2
TOTAL	535

TERS

NNAGE
...1177
...1127
...1554
... 755
... 495
...1443
...1204
... 476
... 246

257

90

186

2

535

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